Process for regulators to review Navy's rad data evaluation

DRAFT Version 1 5-30-2017

Navy already did – K-S test and time series plots

Navy still needs to likely order of reviewing:

- 1. Parcel C (compare w/already resampled)
- 2. Parcel UC-1/UC-2/D-2 (already transferred)
- 3. Parcel G (next parcel City wants to develop)
- 4. Parcel B-1 (following parcel City wants to develop)

Draft Regulators' process for each parcel in Parallel to Navy's process

- 1. Get from Navy Not flagged for sampling = Navy's Phase 1 K-S statistical test and other tests did not flag this survey unit for further sampling
- 2. Score those remaining
  - a. HRA = Historical Radiological Assessment Greater likelihood of radiological impacts from known historic radiological sources upstream [Karla score]
  - b. Land Use = Future Residential use is most sensitive. 1 = inside residential zone, 0.5 = on boundary, 0 = outside of residential.
  - c. Risk = Ra-226 Result divided by 1.69 pCi/g. This is the PRG for 10^-4 calculated by Lyndsey using 2/2017 version of USEPA PRG calculator.
  - d. MAYBE eliminate this screen? Collection date = between 7/1/2008 and 6/30/2011. Former worker alleged in 3/2016 NBC news that swapping soil samples began in 2009. 2014 internal investigation found confirmed falsification beginning 6/7/2011 using Potassium-40 concentration discrepancies. (Source: Investigation Conclusion Anomalous Soil Samples at Hunters Point Naval Shipyard, Revision, 1, April 2014, Hunters Point Naval Shipyard, San Francisoc, CA, Tetra Tech, EC Inc.). 37% of sampling results in NIRIS for all RoC's fell in this time period. [NOTE: Maybe we should not restrict this, since SU 198 showed potential signs of falsification, and that was collected late Jun 2011]
- 3. Statistician review of the highest scoring survey units
  - a. Time Series from Navy
  - b. PCA analysis
- 4. Entire team look at all the information and discuss

Also do 3 & 4 on randomly selected survey unit that the Navy did not flag for sampling.